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BEKELE, MEKONEN T

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/536,643	ZIEL, JONATHAN MARK	
	Examiner	Art Unit	
	MEKONEN BEKELE	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4,8,10-21 and 25-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4,8,10-21 and 25-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05/27/2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 4, 8, 10-21 and 25-38 are pending in this application.

Priority

2. Applicant's claim for domestic priority under 35 U.S.C 119(e) is Acknowledge based on the provisional application 60/430,396, filed on 12/03/2002.

Drawings

3. The drawings filed on 05/27/2005, are accepted for examination

Response to Argument

4. Applicant's arguments filed on 11/18/2008 with respect to claims 10, 25 and 31 have been fully considered, but they are not persuasive, see discussion below.

a) At page 8, claim 31, the applicant argue that Kamiyama *disclosed* the time to acquire three-dimensional data items is **100 msec. to 300 msec.** It does not disclose anything about the latency from star from start of acquisition to **display**.

As to the above argument [a], examiner respectfully disagrees with the applicant because of the following reason.

Kamiyama *disclosed* "exact three-dimensional information is not needed and <u>two to ten depth tomographic</u> <u>images are obtained</u> in the direction perpendicular to the scanning surface. Therefore, the time required to acquire three-dimensional data items is 100 msec to 300 msec at most (col.7. lines 20-27).

The following is an explanation of the function of synthesizing a stereoscopic image from <u>the taken-in depth tomographic images</u> and displaying the image"

From the above statement, as best understood by examiner, Kamiyama suggests time required to obtain and display the two to ten depth tomographic images is between 100 msec to 300 msec at most.

b) At page 11, claim 10, the applicant argue that Koriyama only discusses scanning an ultrasound signal at "several tens of frames per second" in the prior art (but not in Kamiyama's system). It does not disclose anything about the rate at which the stereovision ultrasound image is updated. Specifically Koriyama does not teach *"the stereovision ultrasound image is updated at a rate of greater than or equal to 20 frames per second*"

As to the above argument [b], examiner respectfully disagrees with the applicant because of the following reason.

Koriyama *discusses scanning an ultrasound signal at "several tens of frames per second" in the fourth embodiment of* ***(not in the background)*** *of his invention to improve a flash echo method. More specifically Koriyama* disclosed the principle of the flash echo imaging method (see col10. lines 29-55).

Therefore, as best understood by examiner, **flash echo imaging method where creating a stereoscopic image from the collected images is obtained by switching the continues scanning at a rate of several tens of frames per second disclosed by Kamiyama (co1.9 lines 60-65, co1.10 lines 33-34) corresponds to** "the stereovision ultrasound image is updated at a rate of greater than or equal to 20 frames per second."

c) At page 10, claim 25, the applicant argue that the *MUX1 disclosed by Weiglhofer merely multiplexes disparity values in a coherence detector for executing a disparity-coherence algorithm. Further, applicants* argue *that MUXl does not alternately transmit any first and second 2D rendered images to any display unit to generate a stereovision ultrasound image in real time.*

As to the above argument [c], examiner respectfully disagrees with the applicant because of the following reasons.

i) The multiplexer is a well known electronic device that performs multiplexing; it selects one of many analog or digital input signals and outputs that into a single line. The multiplexer can be used in many applications where the selection between the input signals is required. Weiglhofer disclosed a selection device ("=", MUX1) which outputs the value pair of the input signal values belonging to the smallest determined difference value ("<<")(**see claim1**). Thus, the function of MUX1 is similar to the multiplexer discussed above which select and alternately transmits input data.

ii) Weiglhofer is directed to an image processing device, in particular a device for stereoscopic image processing (abstract). Thus, the MUXl selects and alternately transmits image data.

At page 10, claim 25, the applicant argue that that Weiglhofer and Kamiyama are not "in the same field of endeavor." Kamiyama is classified in class 345/433; Weiglhofer is classified in class 600/443. And there would be any motivation for one of ordinary skill in the art to have modified Kamiyama as proposed.

As to the above argument [d], examiner respectfully disagrees with the applicant because of the following reasons.

i) Even if Kamiyama and Weiglhofer are in different classes, both Kamiyama and Weiglhofer are directed to 3D image processing that includes a medical ultrasound images (**Kamiyama: abstract, Weiglhofer: abstract, col.2 lines 7-12**). Further a multiplexer is a well known electronic device that can be incorporate in many applications where the selection between input signals is required.

Therefore, as best understood by the examiner, it would be obvious to one of ordinary skill in the art at the time the applicant's invention was made to incorporate the multiplexer MUX1 of Weiglhofer into the Ultrasound diagnostic apparatus of Kamiyama, because that would have allowed user of Kamiyama to alternatively display the left eye and the right eye images.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 4, 8, 10-19, 21 and 31-35 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,993,391 A to Kamiyama.

As to claim 10, Kamiyama teaches An ultrasound apparatus (**Abstract, and Fig.1**):

an emitter (**Fig. 1 element 1, Probe 1**) to emit ultrasound signals;

a receiver (**Fig. 1 element 5, ultrasound receiving section)** to receive reflected ultrasound signals **(co1.2 lines 29-38, transmission/reception means to transmit and receive ultrasound to and from a subject to obtain an echo signal and produces an**

ultrasonic image. The ultrasound receiving section receives the echo signal. The reflected ultrasound **signals corresponds to the echo signal),**

a signal processor to convert the reflected ultrasound signals to a stereovision ultrasound image **(co1.7 lines 28-32, the stereoscopic display image memory 18 of FIG. 1 does image processing calculations based on the echo signal received from the probe 1. The signal processor corresponds to the stereoscopic display image memory 18)** in real time (**col.1 line 22);**

generating 3D ultrasound data volumes from the reflected ultrasound signals (col**. 4 lines 1-5, a three-dimension information ultrasound data volumes are obtained from the echo (transmitted) signal.** The 3D ultrasound data volumes **correspond to the three-dimension information);**

and rendering the 3D ultrasound data volumes into first and second 2D images by streaming (**FIG. 15A and FIG. 15B, col.5 lines 8-18, FIG. 15A shows a stereoscopic left-eye image and FIG. 15B shows a stereoscopic right-eye image**. The first and second 2D images **corresponds to FIG. 15A and FIG. 15B respectively. The 2D images are obtained by rending the three-dimension information)** wherein the first and second 2D images comprising the stereovision ultrasound image (**col. 2 lines 30-31, co1.1 lines 8-10, a stereoscopic display memory 13(Fig. 8 element 13) converts the echo signal and generates a stereoscopic image (see Fig. 15A and 15 B) at high speed and displays the image);**

a display unit ***(Fig.1 element 9)*** *to display the stereovision ultrasound image in real time* **(Fig. 1 element 9, co1.1 lines 21-22, the ultrasound diagnostic apparatus has the advantages of enabling real-time display)**;

and a transport unit to house (**co1.1 lines 36-37, the ultrasound diagnostic apparatus is easy to move to the bedside and carry out examination. Thus apparatus can be moved using movable table)** said emitter (**Fig. 1, Pulser 1**), receiver (Fig.1. **element 5),** display unit (**Fig. 1 element 9**), rendering processor (**Fig. 1 element 13 stereoscopic display memory 13)** and said generator **(Fig. 1 element 8., co1.6 lines 48-80, The memory synthesizing section 8 arranges the images and setting parameters or superposes them to produce a video signal and output the signal.** The generator corresponds **to the memory synthesizing section 8**),

where the stereovision ultrasound image is updated at a rate of greater than or equal to 20 frames per second **(co1.9 lines 60-65, co1.10 lines 33-34, Kamiyama specifically teaches flash echo imaging method where creating a stereoscopic image from the collected images is obtained by switching the continues scanning at a rate of several tens of frames per second).**

As to claim 8, Kamiyama teaches said transport unit is a cart (**co1.1 lines 36-37, the ultrasound diagnostic apparatus is easy to move to the bedside. Thus apparatus can be transported using a movable table such as a cart).**

As to claim 11, Kamiyama teaches the 3D ultrasound data volumes comprise first and second 3D data volumes (**col. 4 lines 1-5, the right eye and left eye three-dimension information corresponds** to first and second 3D data volumes), and said rendering processor **(Fig. 8 element 13: stereoscopic display memory 13, the**

stereoscopic display memory transform three-dimension information into two-dimensional tomographic images. The rendering processor corresponds to the stereoscopic display memory);

renders the first and second 3D data volumes into the first and second 2D images, respectively (**FIG. 15A and FIG. 15B, col.5 lines 8-18, FIG. 15A shows a stereoscopic left-eye image and FIG. 15B shows a stereoscopic right-eye image**. The first and second 2D images **corresponds to FIG. 15A and FIG. 15B respectively. FIG. 15 and FIG. 15B are constricted by using the three-dimensional right and left eyes images information).**

As to claim 12, Kamiyama teaches a select unit to alternately transmit the first and second 2D images to said display unit to display the stereovision ultrasound image (**col.8 lines 58-55, a time-division stereoscopic television system where a right image and a left image are presented alternately in the field period t of the display 21 and the liquid-crystal shutter glasses 28 are opened and closed in synchronism with the alternation to provide stereoscopic vision.** The first and second 2D images **correspond to right image and a left image, the select unit corresponds to the liquid- crystal shutter glasses).**

As to claim 13, Kamiyama teaches a user views the stereovision ultrasound image through shuttered glasses (**Fig.7 element 20, the liquid-crystal shutter glasses)**

As to claim 14, Kamiyama teaches said display unit tracks an eye movement of a user to create the stereovision ultrasound image (**Fig.1, col.8 lines 27-29, the**

stereoscopic display image memory 18 synthesizes the received images one after another and supplies the resulting images to the display section 9. Thus the display unit tracks the movement of the eye. The display unit **corresponds to the display section 9).**

As to claim 15, Kamiyama teaches said rendering processor continuously streams the 3D ultrasound data volumes **(Fig.1, col.8 lines 27-29, the stereoscopic display image memory 18 synthesizes the received images one after another and supplies the resulting images to the display section.** Thus memory 18 receives the right and left eyes three-dimension information continuously in real time. The rendering processor **corresponds to stereoscopic display image memory 10).**

As to claim 16, Kamiyama teaches a user views the stereovision ultrasound image, and the stereovision ultrasound image changes corresponding to a movement of the user **(Fig. 17, co1.10 lines 65-67, col. 11 lines 1-3, Kamiyama specifically teaches flash echo imaging ultrasound stereovision system where the system is designed for the operator (not shown) to perform a manual operation.** Thus the stereovision ultrasound image changes when operator operates the power button101).

As to claim 17, Kamiyama teaches the user views the stereovision ultrasound image through a virtual reality viewing unit **(Fig. 1 element 9 Display section correspond**s to the virtual reality viewing unit) connectible to the display unit to change the stereovision ultrasound image in accordance with the movement of the user**(Fig. 17, co1.10 lines 65-67, col. 11 lines 1-3, Kamiyama specifically teaches flash echo imaging ultrasound stereovision system where the system is designed for the**

operator (not shown) to perform a manual operation. Thus the stereovision ultrasound image changes when operator operates the power button101).

As to claim 18, Kamiyama teaches said rendering processor renders the first and second 3D data volumes in series (**Claim 9, Fig.1, col.8 lines 27-29, the stereoscopic display image memory 18 synthesizes the received images one after another and supplies the resulting images to the display section a time-division manner. Thus the memory 18 receives the right and left eyes three-dimension information continuously and displays the 2D two-dimensional tomographic images in the time-division manner (*in series*)).**

As to claim 19, Kamiyama teaches said rendering processor comprises left and right rendering processors to render the first and second 3D data volumes, respectively in parallel (**claim 8, Fig.15A and Fig. 15 B, The stereoscopic display image memory 10 synthesizes the received three-dimension information supplies the resulting images to the display section. The display section displays the right-eye image and said left-eye image side by side (**parallel**)).**

As to claim 21, Kamiyama teaches said emitter and said receiver comprise a two-dimensional phased array transducer (**Fig. 1, col. 6 lines 14-20, an array probe 1 has a plurality of piezoelectric vibrators acting as electromechanical reversible transducer elements. The echo signal the probe 1 outputs channel by channel is supplied to an ultrasound receiving section 5 according to the timing of the rate pulse. Further two-dimensional array probe 30(Fig. 8 element 30) can be used in place of the array probe 1 to obtain plurality of tomographic images rapidly (col. 9**

lines 15-20). The two-dimensional phased array transducer corresponds to **the two-dimensional array probe 30).**

As to claim 34, Kamiyama teaches the stereovision ultrasound image is updated at a rate of less than or equal to 30 frames per second **(col.9 lines 68-65, col.10 lines 33- 34, Kamiyama specifically teaches flash echo imaging method where creating a stereoscopic image from the collected images is obtained by switching the continues scanning at a rate of several tens of frames per second.**)

As to claim 35, Kamiyama teaches the stereovision ultrasound image is updated at a latency of less than or equal to 100 milliseconds from start of acquisition to display **(col.7 lines 22-23, the time required to acquire three-dimensional data items is 100 msec to 300 msec at most.)**

Regarding claim 31 and 32, all claimed limitations are set forth and rejected as per discussion for claims10 and 35

Regarding claims 4 and 33, all claimed limitations are set forth and rejected as per discussion for claim 10.

Claim Rejections - 35 USC § 103

The following is a quotation of the 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained thought the invention is not identically disclosed or described as set forth in section 102 of this title, if the difference between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made

6. Claims 20 and 25-30 and 36-38 are rejected under 35 U.S. C 103(a) as being unpatentable over Kamiyama, US Patent No. 5993391 A, published on 11/30/1999, in view of Weiglhofer et al., (hereafter Weiglhofer) US Patent No. US 6980210 B1 filed on 11/24/1998

As to claim 20, Kamiyama does not specifically teaches "said select unit is a multiplexer" although Kamiyama suggests a time-division stereoscopic television system where a right image and a left image are presented alternately in the field period t of the display 21 and the liquid-crystal shutter glasses 20 are opened and closed in synchronism with the alternation to provide stereoscopic vision. **The multiplexer** corresponds to the liquid-crystal shutter glasses (col. 6 lines 14-20).

On the other hand the 3D real time stereoscopic image processing system of Weiglhofer teaches a multiplexer (**Fig. 4A: selection device ("=", MUX1) which outputs the value pair of the input signal values).**

It would have been obvious to one the ordinary skill in the art at the time of applicant's invention was made to incorporate the 3D stereo real-time sensor system, method and computer program of Weiglhofer into the Ultrasound diagnostic apparatus

capable of displaying ultrasound diagnostic images with a three-dimensional effect of Kamiyama, because both Kamiyama and Weiglhofer are directed to 3D image processing that includes a medical ultrasound images (Kamiyama: abstract, Weiglhofer: abstract, col.2 lines 7-12, Kamiyama: col.2 lines 22-25). Thus, both are the in the same field of endeavor.

It would have been obvious to one of ordinary skill in the art the time of invention was made to incorporate the technique multiplexing image data taught by Weiglhofer into Kamiyama, because that would have allowed user of Kamiyama to select alternatively stereoscopic left-eye and right- eye images in real time more efficiently (Weiglhofer: abstract, Kamiyama: col.9 lines 5-6).

As to claim 25, Kamiyama teaches An ultrasound apparatus **(Fig. 1),** comprising a transducer to emit ultrasound signals and to receive reflected ultrasound signal**(Fig. 1, col. 6 lines 14-20, an array probe 1 has a plurality of piezoelectric vibrators acting as electromechanical reversible transducer elements. The echo signal the probe 1 outputs channel by channel is supplied to an ultrasound receiving section 5 according to the timing of the rate pulse.** Thus the array probe 1 corresponds to the transducer);

a rendering processor to render the stream of detected ultrasound data volumes into first and second 2D rendered images (**FIG. 15A and FIG. 15B, col.5 lines 8-10, FIG. 15A shows a stereoscopic left-eye image and FIG. 15B shows a stereoscopic right- eye image**. The first and second 2D images **corresponds to FIG. 15A and FIG. 15B respectively. The FIG. 15A and FIG. 15B are constricted by using the three-dimensional right and left eyes images information**. The ultrasound data volumes **correspond to three-dimensional right and left eyes images information)**;

However it is noted that Kamiyama does not specifically teaches "a multiplexer to alternately transmit the first and second 2D rendered images to the display unit to generate a stereovision ultrasound image in real time," **although Kamiyama suggests a time-division stereoscopic television system where a right image and a left image are presented alternately in the field period t of the display 21 and the liquid-crystal shutter glasses 20 are opened and closed in synchronism with the alternation to provide stereoscopic vision.** The first and second 2D images **correspond to right image and a left image.** The multiplexer **corresponds to the liquid-crystal shutter glasses, col. 6 lines 14-20)**

On the other hand the 3D real time stereoscopic image processing system of Weiglhofer teaches a multiplexer **(Fig. 4A)** to alternately transmit the first and second 2D rendered images to the display unit to generate a stereovision ultrasound image in real time **(col. 13 lines 21-24, a multiplexer unit (MUXI) which outputs that value pair of the input signal values in real time (Abstract))**

It would have been obvious to one the ordinary skill in the art at the time of applicant's invention was made to incorporate the 3D stereo real-time sensor system, method and computer program of Weiglhofer into the Ultrasound diagnostic apparatus capable of displaying ultrasound diagnostic images with a three-dimensional effect of Kamiyama, because both Kamiyama and Weiglhofer are directed to 3D image processing that includes a medical ultrasound images (Kamiyama: abstract, Weiglhofer: abstract, col.2 lines 7-12, Kamiyama: col.2 lines 22-25). Thus, both are the in the same field of endeavor.

It would have been obvious to one of ordinary skill in the art the time of invention was made to incorporate the technique multiplexing image data taught by Weiglhofer into Kamiyama, because that would have allowed user of Kamiyama to select alternatively stereoscopic left-eye and right- eye images in real time more efficiently (Weiglhofer: abstract, Kamiyama: col.9 lines 5-6).

As to claim 26, Kamiyama teaches a cart to house (**co1.1 lines 36-37, the ultrasound diagnostic apparatus is easy to move to the bedside. Thus apparatus can be transported using a movable table such as a cart)** said transducer (**Fig.1 element 1, the Array Probe**), scanner(**Fig. 3 element 1, col. 3 lines 5-7, FIG. 3 shows an example of creating a stereoscopic image when scanning is effected at regular intervals),** rendering processor **(Fig. 1 element 13 stereoscopic display memory 13),** first and second buffers **(Fig. 1 element 8, Memory combining section),** and said display unit (**Fig. 1 element 9, col. 6 line 52).**

However it is noted that Kamiyama does not specifically teaches "a multiplexer"

On the other hand the 3D real time stereoscopic image processing system of Weiglhofer teaches a multiplexer (**Fig. 4A**)

As to claim 27, Kamiyama teaches rendering processor renders the stream of detected ultrasound data volumes by streaming (**Fig.1, col.8 lines 27-29 the stereoscopic display image memory 18 synthesizes the received images one after another and supplies the resulting images to the display section. Thus memory 18 receives the right eye and left eye three-dimension information continuously in**

real time. The rendering processor corresponds **to stereoscopic display image memory 10).**

As to claim 28, Kamiyama teaches the stereovision ultrasound image is a Color Flow Mode (CFM) image **(col. 9 lines 22-23).**

As to claim 29, Kamiyama the stereovision ultrasound image is a Power Doppler image (**col. 1 lines 38-42, the ultrasound diagnostic apparatus is also capable of displaying the speed distribution of the bloodstream moving toward (or away from) the vibrators in the Doppler ultrasonography or the distribution of power values of the blood echo signal in the power Doppler method).**

As to claim 30, Kamiyama the stereovision ultrasound image is an Acoustic Quantification (AQ) image (**col. 3 lines 58-55, Fig. 18A, Fig. 18 B, FIG. 18A is a color photograph showing a display example of an image for the left eye by a flash echo imaging method.** The Quantification (AQ) image **corresponds to Fig. 18A and Fig. 18B).**

Regarding claim 36, all claimed limitations are set forth and rejected as per discussion for claims 10 and 25.

Regarding claim 37 and 38, all claimed limitations are set forth and rejected as per discussion for claims 33, 35 and 36

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Mekonen Bekele whose telephone number is 571-270-3915. The examiner can normally be reached on Monday -Friday from 8:00AM to 5:50 PM Eastern Time.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor AHMED SAMIR can be reached on (571)272-7413. The fax phone number for the organization where the application or proceeding is assigned is 571-237-8300. Information regarding the status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished application is available through Privet PAIR only.

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/MEKONEN BEKELE/
Examiner, Art Unit 2624
02/27/2008